

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Carl M. Panasik

Serial No.: **09/887,778**

Filed: **06/22/2001**

For: **CELLULAR HANDSET TRANSCEIVER SYSTEM FOR MINIMAL
POWER CONSUMPTION**

Docket No.: **TI-32891**

Examiner: **Perez, Angelica**

Art Unit: **2684**

Confirm. No.: **8711**

SUBSTITUTE APPEAL BRIEF – 37 C.F.R. § 1.192(c)

Commissioner for Patents

Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in connection with the above-identified application
in response to the final Office Action mailed April 20, 2006.

I. REAL PARTY IN INTEREST

Texas Instruments Incorporated is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Final rejection of Claims 1-31 was made by the Examiner in the Office Action dated April 20, 2006. Claims 1-31 are on appeal. Claims 1-31 are reproduced in the Appendix to Appellants' Brief filed herewith.

IV. STATUS OF AMENDMENTS

An Amendment 37 CFR § 1.116 mailed by Appellants on December 6, 2005. In an Advisory Action mailed on September 13, 2006 the Examiner refused to enter the amendment because "it did not place the application in condition for allowance". Appellants respectfully point out that the Examiner's refusal to enter the amendment for purposes of appeal is improper since the Amendment dated December 6, 2005 contained no amendments to the claims or specification. Examiner should have entered the amendment because there was no reason not to. But the failure of the Examiner to enter the amendment does not affect the claims or arguments in the present appeal. This appeal is from the Office Action dated April 20, 2006.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

A system and method of wireless data communication between a base station and a mobile station employs mobile receiver and computing algorithms to cause the mobile station transmitter to selectively enter a low power or idle transmission mode when the mobile station is in a shadow of the base station such that wasted RF and DC power is avoided in poor propagation situations. Cellular handset battery power is thus conserved to extend CDMA handset talk time.

More specifically, independent Claim 1 requires and positively recites, a method (page 5, lines 14-16) of data communication between a base station and a mobile station over a wireless communication network (page 4, lines 7-8; Figs. 5-7), the method comprising the steps of:

transmitting data signals between a mobile station and a base station (page 4, lines 8, 10 and 23);

monitoring the data signals received by the mobile station from the base station (page 5, line 16); and

disabling the ability of the mobile station to transmit data signals to, while (page 5, line 21) maintaining the ability of the mobile station to receive data signals (page 5, lines 21-11) from, the base station when the mobile station is in a shadow of the base station (page 5, line 18).

Independent Claim 10 requires and positively recites, a method of data communication between a base station and a mobile station over a wireless communication network (page 4, lines 7-8; Figs. 5-7), the method comprising the steps of:

transmitting data signals between a mobile station and a base station (page 4, lines 8, 10 and 23);

monitoring the signal to noise ratio (SNR) of the data signals received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station (page 5, lines 16-19); and

disabling transmission of data signals from and maintaining reception of data signals by the mobile station when the mobile station is in a shadow of the base station (page 5, line 21).

Independent Claim 16 requires and positively recites, a method of data communication between a base station and a mobile station over a wireless communication network (page 4, lines 7-8; Figs. 5-7), the method comprising the steps of:

transmitting data signals between a mobile station and a base station (page 4, lines 8, 10 and 23);

transmitting a signal from the base station to the mobile station that indicates a loss of at least one primary base station rake finger (page 6, lines 3-4) to provide a determination (page 6, lines 1-4) that the mobile station is in a shadow of the base station; and

disabling transmission (page 5, line 21) of data signals by the mobile station while maintaining the ability of the mobile station to receive data signals (page 5, lines 21-22) when the mobile station is in a shadow of the base station.

Independent Claim 22 requires and positively recites a method (page 5, lines 14-16) of data communication between a base station and a mobile station over a wireless

communication network (page 4, lines 7-8; Figs. 5-7), the method comprising the steps of:

transmitting data signals between a mobile station and a base station (page 4, lines 8, 10 and 23);

monitoring the data signals received by the mobile station from the base station (page 5, line 16);

detecting an abrupt change in signal delay (page 6, lines 4-6) received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of (page 6, lines 6-7) the base station; and

disabling transmission of the data signals by the mobile station (page 5, line 21), while maintaining the ability of the mobile station to receive data signals (page 5, lines 21-22) transmitted by the base station, when the mobile station is in a shadow of the base station (page 5, line 18).

Independent Claim 28 requires and positively recites a method of power management (page 5, lines 15-16) in a wireless communication transceiver comprising the steps of:

monitoring data signal quality received by the transceiver (page 5, line 16); and

disabling the ability of the transceiver to transmit data signals (page 5, line 21), while maintaining the ability of the transceiver to receive data signals when the received signal quality falls below a pre-determined threshold (page 5, lines 16-19).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1) Are Claims 1-8, 10-14, 16-20, 22-26 and 28 patentable under 35 U.S.C. 103(a) over Rainish (Rainish et al., US Patent No.: 6,606,490 B1) in view of Harrison (Harrison, Collin G.; US Patent No.: 5,181,200 A)?

2) Are Claims 9, 15, 21, 27, 29 and 30 patentable under 35 U.S.C. 103(a) over Rainish (Rainish et al., US Patent No.: 6,606,490 B1) in view of Harrison (Harrison, Collin G.; US Patent No.: 5,181,200 A) as applied to claims 7, 13, 19 and 25, and further in view of Bergins (Bergins et al., Patent No. 6,564,071 B1)?

3) Is Claim 31 patentable under 35 U.S.C. 103(a) over Rainish (Rainish et al., US Patent No.: 6,606,490 B1) in view of Harrison (Harrison, Collin G.; US Patent No.: 5,181,200 A), and further in view of Bartle (Bartle et al., Patent No. 6,018,655 A)?

VII. ARGUMENTS

1) 35 U.S.C. § 103(a) rejection over Rainish in view of Harrison.

Claims 1-8, 10-14, 16-20, 22-26 and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish (Rainish et al., US Patent No.: 6,606,490 B1) in view of Harrison (Harrison, Collin G.; US Patent No.: 5,181,200 A). Appellants respectfully traverse this rejection as follows:

Independent Claim 1, as amended, requires and positively recites a method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of: "transmitting data signals

between a mobile station and a base station”, “monitoring the data signals received by the mobile station from the base station” and **“disabling the ability of the mobile station to transmit data signals to, while maintaining the ability of the mobile station to receive data signals from, the base station when the mobile station is in a shadow of the base station”**.

Independent Claim 10, as amended, requires and positively recites, a method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of: “transmitting data signals between a mobile station to a base station”, **“monitoring the signal to noise ratio (SNR) of data signals received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station”** and **“disabling transmission of data signals from and maintaining reception of data signals by the mobile station when the mobile station is in a shadow of the base station”**.

Independent Claim 16, as amended, requires and positively recites, a method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of: “transmitting data signals between a mobile station and a base station”, “transmitting a signal from the base station to the mobile station that indicates a loss of at least one primary base station rake finger to provide a determination that the mobile station **is in a shadow of the base station**” and **“disabling transmission of data signals by the mobile station while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station”**.

Independent Claim 22, as amended, requires and positively recites, a method of data communication between a base station and a mobile station over a wireless

communication network, the method comprising the steps of: “transmitting data signals between a mobile station and a base station”, “monitoring the data signals received by the mobile station from the base station”, “detecting an abrupt change in signal delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station” and **“disabling transmission of the data signals by the mobile station, while maintaining the ability of the mobile station to receive data signals transmitted by the base station, when the mobile station is in a shadow of the base station”**.

Independent Claim 28 requires and positively recites, a method of power management in a wireless transceiver comprising the steps of: “monitoring data signal quality received by the transceiver”, **“disabling the ability of the transceiver to transmit data signals, while maintaining the ability of the transceiver to receive data signals when the received signal quality falls below a pre-determined threshold”**.

In contrast, the Rainish reference discloses a battery-powered portable radio receiver and method of operating the battery-powered radio receiver (Abstract, lines 1-2) in which, in contrast to the present invention, **the receiver goes to sleep during predetermined time periods**. In a Standby Mode, a receive path of the radio receiver is activated during a data-detection time interval for the detection of data destined for selected receivers, and a preconditioning time interval for performing pre-conditioning functions with respect to the receiver before the data-detection time interval (Abstract lines 4-9). In the background of the invention, Rainish states:

In these terminals the Standby mode consists of a **relatively long “sleep” interval in which most of the terminal blocks of the mobile station are deactivated**, and a **relatively short “reception” interval in which the terminal is enabled to receive from the base station transmitted data**, usually a paging or a broadcast message, which may be intended for the

terminal. The mobile station checks whether this message is intended for itself, and according to its contents, decides on further actions, like going to the sleep phase ... (col. 1, lines 18-28).

Indeed, Rainish goes on to state in its “description of preferred embodiments of the present invention”, that “the present invention overcomes the disadvantages of the prior art, by providing a novel method which reduces the wake up time of the radio section as well as the baseband section” (col. 2, lines 64-67). As such, **Rainish actually turns off its receiver**, whereas the present invention turns off the transmitter portion of the transceiver in the mobile station, but keeps the receiver portion on. Rainish gives a further definition of the sleep mode: “the receiver goes into a sleep mode until the slot beginning (block 580). In this sleep mode, **all parts of the receiver** (RF parts and base band parts) **can be turned off** except those parts which are needed for waking up the receiver at the slot start (such as a low power counter). Page 3 (Office Action dated April 20, 2005) of Examiner’s analysis is particularly off the mark. Appellants respectfully submit that the Examiner is reading functionality into Rainish’s specification that does not exist. Examiner writes: “an abrupt change in signal delay is an inherent indicator of shadowing”, but there is nothing in the Rainish reference that would lead one to that conclusion. Column 1, lines 28-35 describes a pre-conditioning or synchronization period in which the standby mode receiver sets its parameters close to those used in the previous active mode. In addition, Examiner’s determination: “a loss of at least one primary base station rake finger is an indication of loss of signal or shadowing” cannot be discerned from the textbook explanation of a RAKE receiver in column 2, lines 21-29 and the startup time calculation in column 2, lines 42-52.

Indeed, Examiner admits that Rainish does not teach a transceiver and of disabling transmission of signals by the mobile station, while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station (Office Action dated April 20, 2005, page 3, lines 12-14).

Accordingly, Rainish fails to teach or suggest, “**disabling the ability of the mobile station to transmit data signals to, while maintaining the ability of the mobile station to receive data signals from,** the base station when the mobile station is in a shadow of the base station”, as required by Claim 1, OR “**disabling transmission** of data signals from and maintaining reception of data signals by the mobile station when the mobile station is in a shadow of the base station”, as required by Claim 10, OR “**disabling transmission** of data signals by the mobile station while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station”, as required by Claim 16, OR “**disabling transmission** of the data signals by the mobile station, while maintaining the ability of the mobile station to receive data signals transmitted by the base station, when the mobile station is in a shadow of the base station”, as required by Claim 22 OR **disabling** the ability of the transceiver to **transmit** data signals, while maintaining the ability of the transceiver to receive data signals when the received signal quality falls below a pre-determined threshold as required by Claim 28.

The Examiner relies upon Harrison to supplement the deficiencies of Rainish. Appellants respectfully submit that the Examiner seems to be misapplying the teaching of Harrison to the present invention. The Examiner states that Harrison teaches “disabling transmission of signals by the mobile station, while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station” making reference to column 7, lines 5-10. Column 7, lines 6-12 of Harrison states:

e) Control of optical power or of data transmission rates to accommodate a close approach to the base station 12 by the mobile unit 10 or to **permit lowered transmission rates when the signal path is shadowed.** By example, it may be desirable to **reduce transmitted power within a certain radius of the base station 12** in order to prevent overdriving the CR 30b.

Thus, Harrison discloses “lowering” or “reducing” but NOT “stopping” or “disabling” transmission rates or transmitted power by the mobile when it is in the shadow of a base station. Accordingly, any combination of Rainish and Harrison fails to teach or suggest, “**disabling** the ability of the mobile station **to transmit** data signals to, while maintaining the ability of the mobile station to receive data signals from, the base station when the mobile station is in a shadow of the base station”, as required by Claim 1, OR “**disabling transmission** of data signals from and maintaining reception of data signals by the mobile station when the mobile station is in a shadow of the base station”, as required by Claim 10, OR “**disabling transmission** of data signals by the mobile station while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station”, as required by Claim 16, OR “**disabling transmission** of the data signals by the mobile station, while maintaining the ability of the mobile station to receive data signals transmitted by the base station, when the mobile station is in a shadow of the base station”, as required by Claim 22 OR **disabling** the ability of the transceiver **to transmit** data signals, while maintaining the ability of the transceiver to receive data signals when the received signal quality falls below a pre-determined threshold as required by Claim 28.

Appellants further point out that in the present invention, transmission is ceased in a shadowed condition to conserve handset battery power - NOT to affect bit-error-rate, as taught by Harrison. Additionally, the present invention has nothing to do with optical communications. Even assuming, arguendo, Harrison discloses a method and system for disabling transmission of signals by the mobile station when in a shadow of a base station, Harrison does not teach or suggest the above-identified deficiencies of the Rainish reference. As such, any combination of Rainish and Harrison fails to teach or suggest the limitations of these claims and the 35 U.S.C. 103(a) rejection is overcome.

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art”. In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**”, In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. As discussed above, Examiner has failed to set forth any legitimate suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in that art, to combine with Harrison AND modify the resulting combination, as would be required in order to arrive

at the claimed invention. Second, there must be a reasonable expectation of success. Examiner has failed to provide any evidence that combining Rainish with Harrison will result in an apparatus that would successfully implement all of the elements of Claims 1, 10, 16, 22 and 28. Finally, the prior art reference (or references when combined) must teach or suggest ALL the claim limitations (MPEP § 2143). Appellants respectfully submit that the Examiner has failed to establish all three criteria. Accordingly, Claims 1, 10, 16, 22 and 28 are patentable under 35 U.S.C. § 103(a) over Rainish in view of Harrison.

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). It is clear from the above analysis that the Examiner did not consider all the words of Claims 1, 10, 16, 22 and 28, as is required by law.

Claims 2-8, 11-14, 17-20 and 23-26 stand allowable as depending from allowable claims and including further limitations not taught or suggested by the references of record.

Claim 2 further defines the method according to claim 1 wherein the step of monitoring the data signal received by the mobile station from the base station comprises monitoring the signal to noise ratio (SNR) of the data signal received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station. Claim 2 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, cols. 6 and 7, lines 65-67 and 1-2, respectively, of Rainish, relied upon by Examiner for the above teaching does not obviate this claim. The language cited in Rainish requires: "estimating ...predetermined characteristics comprises **determining an estimated** signal-to-noise-and interference of

said signal”. As such, any combination of Rainish and Harrison fails to teach or suggest, **“monitoring the signal to noise ratio (SNR) of the data signal received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station”**, as further required by Claim 2. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 2 is improper and must be withdrawn.

Claim 3 further defines the method according to claim 1 wherein the step of monitoring the data signal received by the mobile station from the base station comprises receiving **a control signal from the base station that indicates a loss of primary base station rake fingers to provide a determination whether the mobile station is in a shadow** of the base station. Claim 3 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, col. 5, lines 23-25 of Rainish, relied upon by Examiner mentions “wherein said receiver is a “RAKE” receiver, and said multipath search function is a finger-positioning function”, but it fails to further teach or suggest, **“...a control signal from the base station that indicates a loss of primary base station rake fingers to provide a determination whether the mobile station is in a shadow** of the base station”, as further required by Claim 3. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 3 is improper and must be withdrawn.

Claim 4 further defines the method according to claim 1 further comprises the steps of: “monitoring the delay of the data signal received by the mobile station from the base station” and **“identifying an abrupt change in the delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station”**. Claim 4 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, while col. 1, lines 28-35 of Rainish, relied upon by Examiner mentions “prior to the data detection in the reception phase, there is a pre-conditioning or synchronization period in which the receiver pre-

conditions the receive path for data detection, e.g., synchronizes to the correct gain, frequency, DC offset, timing and/or to other parameters the receiver may need – examples for such parameters are equalizer tap gains when a equalizer is employed, or “fingers” gains and delays when a “RAKE” receiver is employed”, it fails to teach or suggest, **“identifying an abrupt change in the delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station”**, as further required by Claim 4. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 4 is improper and must be withdrawn.

Claim 5 further defines the method according to claim 1 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output until the mobile station transmitter enters an idle (off) state**. Claim 5 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, while col. 4, lines 32-37 of Rainish, relied upon by Examiner mentions “if this quality measure exceeds a predefined threshold (block 560), the receiver goes into a sleep mode until the slot beginning”, it fails to teach or suggest, **“...ramp down its power output until the mobile station transmitter enters an idle (off) state”**, as further required by Claim 5. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 5 is improper and must be withdrawn.

Claim 6 further defines the method according to claim 1 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output to achieve a power condition associated with a previous period of time**. Claim 6 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, while col. 4, lines 34-41 of

Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp down its power output** to achieve a power condition **associated with a previous period of time**”, as further required by Claim 6. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 6 is improper and must be withdrawn.

Claim 7 further defines the method according to claim 1 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station **and subsequent to disabling transmission of the data signal at a previous power level** by the mobile station. Claim 7 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, while col. 4, lines 32-41 of Rainish, relied upon by Examiner mentions “those skilled in the art are aware of a variety of quality measures and methods of generating them - in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**and subsequent to disabling transmission of the data signal at a previous power level** by the mobile station”, as further required by Claim 7. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 7 is improper and must be withdrawn.

Claim 8 further defines the method according to claim 7 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**. Claim 8 stands allowable for the same reasons set forth above in support of the allowance of Claim 1. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**”, as further required by Claim 8. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 8 is improper and must be withdrawn.

Claim 9 further defines the method according to claim 7 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a maximum power level. Claim 9 stands allowable for the same reasons set forth above in support of the allowance of Claim 7. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp**

up its power output until the mobile station transmitter output power level reaches a previous power level”, as further required by Claim 8. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 8 is improper and must be withdrawn.

Claim 11 further defines the method according to claim 10 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output until the mobile station transmitter enters an idle (off) state**. Claim 11 stands allowable for the same reasons set forth above in support of the allowance of Claim 10. Moreover, while col. 4, lines 32-37 of Rainish, relied upon by Examiner mentions “if this quality measure exceeds a predefined threshold (block 560), the receiver goes into a sleep mode until the slot beginning”, it fails to teach or suggest, “**...ramp down its power output until the mobile station transmitter enters an idle (off) state**”, as further required by Claim 11. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 11 is improper and must be withdrawn.

Claim 12 further defines the method according to claim 10 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output to achieve a power condition associated with a previous period of time**. Claim 12 stands allowable for the same reasons set forth above in support of the allowance of Claim 10. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the

quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp down its power output** to achieve a power condition **associated with a previous period of time**”, as further required by Claim 12. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 12 is improper and must be withdrawn.

Claim 13 further defines the method according to claim 10 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station **and subsequent to disabling transmission of the data signal** by the mobile station. Claim 13 stands allowable for the same reasons set forth above in support of the allowance of Claim 10. Moreover, while col. 4, lines 32-41 of Rainish, relied upon by Examiner mentions “those skilled in the art are aware of a variety of quality measures and methods of generating them - in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**and subsequent to disabling transmission of the data signal at a previous power level** by the mobile station”, as further required by Claim 13. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 13 is improper and must be withdrawn.

Claim 14 further defines the method according to claim 13 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**. Claim 14 stands

allowable for the same reasons set forth above in support of the allowance of Claim 13. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**”, as further required by Claim 14. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 14 is improper and must be withdrawn.

Claim 17 further defines the method according to claim 16 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output until** the mobile station transmitter **enters an idle (off) state**. Claim 17 stands allowable for the same reasons set forth above in support of the allowance of Claim 16. Moreover, while col. 4, lines 32-37 of Rainish, relied upon by Examiner mentions “if this quality measure exceeds a predefined threshold (block 560), the receiver goes into a sleep mode until the slot beginning”, it fails to teach or suggest, “...**ramp down its power output until** the mobile station transmitter **enters an idle (off) state**”, as further required by Claim 17. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 17 is improper and must be withdrawn.

Claim 18 further defines the method according to claim 16 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output** to achieve a power condition associated

with a **previous period of time**. Claim 18 stands allowable for the same reasons set forth above in support of the allowance of Claim 16. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp down its power output** to achieve a power condition **associated with a previous period of time**”, as further required by Claim 18. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 18 is improper and must be withdrawn.

Claim 19 further defines the method according to claim 16 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station **and subsequent to disabling transmission of the data signal** by the mobile station. Claim 19 stands allowable for the same reasons set forth above in support of the allowance of Claim 16. Moreover, while col. 4, lines 32-41 of Rainish, relied upon by Examiner mentions “those skilled in the art are aware of a variety of quality measures and methods of generating them - in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**and subsequent to disabling transmission of the data signal at a previous power level** by the mobile station”, as further required by Claim 19. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 19 is improper and must be withdrawn.

Claim 20 further defines the method according to claim 19 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**. Claim 20 stands allowable for the same reasons set forth above in support of the allowance of Claim 19. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**”, as further required by Claim 20. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 20 is improper and must be withdrawn.

Claim 23 further defines the method according to claim 22 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output until** the mobile station transmitter **enters an idle (off) state**. Claim 23 stands allowable for the same reasons set forth above in support of the allowance of Claim 22. Moreover, while col. 4, lines 32-37 of Rainish, relied upon by Examiner mentions “if this quality measure exceeds a predefined threshold (block 560), the receiver goes into a sleep mode until the slot beginning”, it fails to teach or suggest, “...**ramp down its power output until** the mobile station transmitter **enters an idle (off) state**”, as further required by Claim 23. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 23 is improper and must be withdrawn.

Claim 24 further defines the method according to claim 22 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station **to ramp down its power output** to achieve a power condition associated with **a previous period of time**. Claim 24 stands allowable for the same reasons set forth above in support of the allowance of Claim 22. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp down its power output** to achieve a power condition **associated with a previous period of time**”, as further required by Claim 24. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 24 is improper and must be withdrawn.

Claim 25 further defines the method according to claim 22 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station **and subsequent to disabling transmission of the data signal** by the mobile station. Claim 25 stands allowable for the same reasons set forth above in support of the allowance of Claim 22. Moreover, while col. 4, lines 32-41 of Rainish, relied upon by Examiner mentions “those skilled in the art are aware of a variety of quality measures and methods of generating them - in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each

finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**and subsequent to disabling transmission of the data signal at a previous power level** by the mobile station”, as further required by Claim 25. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 25 is improper and must be withdrawn.

Claim 26 further defines the method according to claim 25 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**. Claim 26 stands allowable for the same reasons set forth above in support of the allowance of Claim 25. Moreover, while col. 4, lines 34-41 of Rainish, relied upon by Examiner mentions “in this sleep mode, all parts of the receiver (RF parts and baseband parts) can be turned off except those parts which are needed for waking up the receiver at the slot start (such as a low power counter) – if the quality criteria are not met, the search window around each finger, the dwell time and the quality threshold are updated, and steps 550 to 570 are repeated – obviously all thresholds can be adaptive”, it fails to teach or suggest, “...**ramp up its power output until** the mobile station transmitter output power level **reaches a previous power level**”, as further required by Claim 26. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 26 is improper and must be withdrawn.

2) 35 U.S.C. § 103(a) rejection over Rainish in view of Harrison and further in view of Bergins.

Claims 9, 15, 21 and 27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish in view of Harrison as applied to claims 7, 13, 19 and 25 above, and further in view of Bergins (Bergins et al., Patent No. 6,564,071 B1). Appellants respectfully traverse this rejection as follows:

Claim 9 further defines the method according to claim 7 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**. Examiner admits that Rainish in view of Harrison does not teach the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the maximum power level (Office Action dated April 20, 2005, page 7, lines 13-17). Appellants respectfully point out that, contrary to Examiner's determination, Bergins similarly fails to teach or suggest the above limitation. Bergins teaches, "...and receiving stations will be transparently re-established and the transmission of data will resume from the point of the last known good packet transmission, thereby reducing the costs associated with the retransmission of the entire file" (col. 3, lines 17-21). However, nothing in the above teaches that the mobile station transmitter output power level "reaches a maximum power level". Accordingly, any combination of Rainish, Harrison and Bergins fails to teach or suggest, "the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**", as required by Claim 9. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 9 is improper and must be withdrawn.

Claim 15 further defines the method according to claim 13 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**. Examiner admits that Rainish in view of Harrison does not teach the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the maximum power level (Office Action dated April 20, 2005, page 7, lines 13-17). Appellants respectfully point out that, contrary to Examiner's determination, Bergins similarly fails to teach or suggest the above limitation. Bergins teaches, "...and receiving stations will be transparently re-established and the transmission of data will resume from the point of the last known good packet transmission, thereby reducing the costs associated with the retransmission of the entire file" (col. 3, lines 17-21). However, nothing in the above teaches that the mobile station transmitter output power level "reaches a maximum power level". Accordingly, any combination of Rainish, Harrison and Bergins fails to teach or suggest, "the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**", as required by Claim 15. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 15 is improper and must be withdrawn.

Claim 21 further defines the method according to claim 19 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**. Examiner admits that

Rainish in view of Harrison does not teach the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the maximum power level (Office Action dated April 20, 2005, page 7, lines 13-17).

Appellants respectfully point out that, contrary to Examiner's determination, Bergins similarly fails to teach or suggest the above limitation. Bergins teaches, "...and receiving stations will be transparently re-established and the transmission of data will resume from the point of the last known good packet transmission, thereby reducing the costs associated with the retransmission of the entire file" (col. 3, lines 17-21). However, nothing in the above teaches that the mobile station transmitter output power level "reaches a maximum power level". Accordingly, any combination of Rainish, Harrison and Bergins fails to teach or suggest, "the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**", as required by Claim 21. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 21 is improper and must be withdrawn.

Claim 27 further defines the method according to claim 25 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**. Examiner admits that Rainish in view of Harrison does not teach the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the maximum power level (Office Action dated April 20, 2005, page 7, lines 13-17).

Appellants respectfully point out that, contrary to Examiner's determination, Bergins similarly fails to teach or suggest the above limitation. Bergins teaches, "...and receiving stations will be transparently re-established and the transmission of data will resume from the point of the last known good packet transmission, thereby reducing the costs associated with the retransmission of the entire file" (col. 3, lines 17-21). However, nothing in the above teaches that the mobile station transmitter output power level "reaches a maximum power level". Accordingly, any combination of Rainish, Harrison and Bergins fails to teach or suggest, "the mobile station comprises causing a transmitter associated with the mobile station **to ramp up its power output until** the mobile station transmitter output power level **reaches a maximum power level**", as required by Claim 27. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 27 is improper and must be withdrawn.

3) 35 U.S.C. § 103(a) rejection over Rainish in view of Harrison and further in view of Bartle.

Claim 31 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish in view of Harrison, and further in view of Bartle (Bartle et al.; US Patent No.: 6,018,655 A). Appellants respectfully traverse this rejection as follows:

Claim 31 further defines the method of Claim 1 wherein the "wireless communications transceiver is a cellular handset transceiver".

Examiner admits that Rainish does not teach where the wireless communication transceiver is a cellular handset transceiver (Office Action dated April 20, 2005, page 8, lines 19-20). Examiner instead relies upon Bartle for such teaching. Appellants have previously pointed out why any combination of Rainish and Harrison fails to teach or suggest all of the limitations of Claim 1. Nothing in Bartle overcomes the previously identified deficiencies of Rainish and Harrison. As such, any combination of Rainish,

Harrison and Bartle fails to teach or suggest the limitations of Claim 31. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 31 is improper and must be withdrawn.

CLAIMS APPENDIX

CLAIMS ON APPEAL:

1. A method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of:
transmitting data signals between a mobile station and a base station;
monitoring the data signals received by the mobile station from the base station;
and
disabling the ability of the mobile station to transmit data signals to, while maintaining the ability of the mobile station to receive data signals from, the base station when the mobile station is in a shadow of the base station.
2. The method according to claim 1 wherein the step of monitoring the data signal received by the mobile station from the base station comprises monitoring the signal to noise ratio (SNR) of the data signal received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station.
3. The method according to claim 1 wherein the step of monitoring the data signal received by the mobile station from the base station comprises receiving a control signal from the base station that indicates a loss of primary base station rake fingers to provide a determination whether the mobile station is in a shadow of the base station.

4. The method according to claim 1 further comprises the steps of:

monitoring the delay of the data signal received by the mobile station from the base station; and

identifying an abrupt change in the delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station.
5. The method according to claim 1 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output until the mobile station transmitter enters an idle (off) state.
6. The method according to claim 1 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output to achieve a power condition associated with a previous period of time.
7. The method according to claim 1 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station and subsequent to disabling transmission of the data signal at a previous power level by the mobile station.
8. The method according to claim 7 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile

station to ramp up its power output until the mobile station transmitter output power level reaches a previous power level.

9. The method according to claim 7 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a maximum power level.

10. A method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of:

transmitting data signals between a mobile station and a base station;

monitoring the signal to noise ratio (SNR) of the data signals received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station; and

disabling transmission of data signals from and maintaining reception of data signals by the mobile station when the mobile station is in a shadow of the base station.

11. The method according to claim 10 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output until the mobile station transmitter enters an idle (off) state.

12. The method according to claim 10 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output to achieve a power condition associated with a previous period of time.

13. The method according to claim 10 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station and subsequent to disabling transmission of the data signal by the mobile station.

14. The method according to claim 13 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a previous power level.

15. The method according to claim 13 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a maximum power level.

16. A method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of:
transmitting data signals between a mobile station and a base station;

transmitting a signal from the base station to the mobile station that indicates a loss of at least one primary base station rake finger to provide a determination that the mobile station is in a shadow of the base station; and

disabling transmission of data signals by the mobile station while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station.

17. The method according to claim 16 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output until the mobile station transmitter enters an idle (off) state.

18. The method according to claim 16 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output to achieve a power condition associated with a previous period of time.

19. The method according to claim 16 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station and subsequent to disabling transmission of the data signal by the mobile station.

20. The method according to claim 19 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a previous power level.

21. The method according to claim 19 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a maximum power level.

22. A method of data communication between a base station and a mobile station over a wireless communication network, the method comprising the steps of:

- transmitting a data signals between a mobile station and a base station;
- monitoring the data signals received by the mobile station from the base station;
- detecting an abrupt change in signal delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station; and
- disabling transmission of the data signals by the mobile station, while maintaining the ability of the mobile station to receive data signals transmitted by the base station, when the mobile station is in a shadow of the base station.

23. The method according to claim 22 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile

station to ramp down its power output until the mobile station transmitter enters an idle (off) state.

24. The method according to claim 22 wherein the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output to achieve a power condition associated with a previous period of time.

25. The method according to claim 22 further comprising the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station and subsequent to disabling transmission of the data signal by the mobile station.

26. The method according to claim 25 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a previous power level.

27. The method according to claim 25 wherein the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a maximum power level.

28. A method of power management in a wireless communication transceiver comprising the steps of:
- monitoring data signal quality received by the transceiver; and
 - disabling the ability of the transceiver to transmit data signals, while maintaining the ability of the transceiver to receive data signals when the received signal quality falls below a pre-determined threshold.
29. The method according to claim 28 wherein the received signal quality is defined by SNR.
30. The method according to claim 28 wherein the received signal quality is defined as an received signal level.
31. The method according to claim 1 wherein the wireless communication transceiver is a cellular handset transceiver.

EVIDENCE APPENDIX

No documents are being submitted with the Appeal Brief.

RELATED PROCEEDINGS APPENDIX

None.